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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,711	12/20/2000	Ben Smeets	P12137US1	9096

27045 7590 12/14/2005

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EXAMINER	
DO, CHAT C	

ART UNIT	PAPER NUMBER
2193	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/742,711	SMEETS, BEN	
	Examiner	Art Unit	
	Chat C. Do	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-11 and 14-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *4,5,7,14 and 15* is/are allowed.

6)☒ Claim(s) *1, 6, 8-11, 16-20, and 23* is/are rejected.

7)☒ Claim(s) *21 and 22* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____. .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to Amendment filed 10/11/2005.

2. Claims 1, 4-11, and 14-23 are pending in this application. Claims 1, 4-5, 7, 11, 14-15, and 20 are independent claims. In Amendment, claims 2-3 and 12-13 are cancelled and claims 20-23 are added. This Office Action is made non-final after a RCE filed 10/11/2005.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1, 11, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Currie (U.S. 5,974,433).

Re claim 1, Currie discloses in Figure 3 an electrical device for generating pseudo random noise (PN) output sequence (e.g. abstract; col. 2 lines 14-19 wherein PN sequence output as M-sequence; and output of 314 with PN code label at 315) comprising:

a sequence generation (e.g. outputs of 308 into 309) to output a plurality sequence values ($X_{Ni}...X_{Ni+N-1}$) based of a step control signal (St) (e.g. output of 304 as the control signal to the mux);

a control and selection system (e.g. 309A and 309B without label) coupled to the sequence generator adapted to select one of plurality of sequence values (e.g. outputs from 308) ($X_{Ni}.....X_{Ni+N-1}$) from the sequence generator based on a select value (Mt) (e.g. output of 305 as Mt), wherein the select value (Mt) provided on the basis a clock control value (e.g. 300) or signal (Ct) and a previously generated select value (e.g. 2-bit counter clk, it must store or generated based on the previous sample);

and a step control (e.g. 304) of the control and selection system adapted provide step control signal (S_t) (e.g. output of 304 into 308) to the sequence generator, wherein the step control signal (S_t) (e.g. output of 304) is provided based on a clock control value (e.g. 300) or signal (C_t) and a previously generated selected value (e.g. 2-bit counter clk, it must store or generated based on the previous sample).

Re claim 11, it is a method claim of claim 1. Thus, claim 11 is also rejected under the same rationale as cited in the rejection claim 1.

Re claim 20, it is a generator claim of claim 1. Thus, claim 20 is also rejected under the same rationale as cited in the rejection claim 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 6, 16, and 23 are rejected under 35 U.S.C. 103(a) as being obvious over Currie (U.S. 5,974,433) in view of Smeets et al. ("Windmill pn-sequence generators").

Re claim 6, Currie does not disclose the sequence electrical device further comprising a windmill polynomial generator. However, Smeets et al. disclose the windmill polynomial generator (abstract lines 1-5) as a high speed sequence generator capable of producing blocks of consecutive symbols in parallel. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention is made to add a windmill generator as seen in Smeets et al.'s invention in place of sequence generator as seen in Currie's invention because it would enable to increase the output of pseudo random noise sequence (abstract line 1) by having high speed sequence generator.

Re claim 16, it is a method claim of claim 6. Thus, claim 16 is also rejected under the same rationale as cited in the rejection claim 6.

Re claim 23, it is a generator claim of claim 6. Thus, claim 23 is also rejected under the same rationale as cited in the rejection claim 6.

7. Claims 8-10 and 17-19 are rejected under 35 U.S.C. 103(a) as being obvious over Currie (U.S. 5,974,433) in view of Saints et al. (U.S. 6,430,170).

Re claims 8-10, Currie does not disclose sequence electrical device is used in a portable device as a mobile telephone in a stationary communication. However, Saints et al. disclose in Figure 1 sequence electrical device is used in a portable device as a mobile telephone in a stationary communication (abstract). Therefore, it would have been obvious application to a person having ordinary skill in the art at the time the invention is

made to used the sequence electrical device in a portable device as a mobile telephone in a stationary communication as seen in Saints et al.'s invention into Currie's invention because it would enable to increase the security in communication by increasing randomness in sequence (col. 1 lines 40-48).

Re claim 17, it is a method claim of claim 8. Thus, claim 17 is also rejected under the same rationale as cited in the rejection claim 8.

Re claim 18, it is a method claim of claim 9. Thus, claim 18 is also rejected under the same rationale as cited in the rejection claim 9.

Re claim 19, it is a method claim of claim 10. Thus, claim 19 is also rejected under the same rationale as cited in the rejection claim 10.

Allowable Subject Matter

8. Claims 4-5, 7, and 14-15 are allowed.

9. Claims 21-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments filed 10/11/2005 have been fully considered but they are not persuasive.

a. The applicant argues in pages 10-12 for independent claims 1 and 11 that the cited reference by Currie generally does not disclose the lower module called the control and

select system module. The reference does not provide for non-uniform sampling as cited in the claimed invention. Also, reference discloses the selected value is dependent only on a clock signal, but a previous generated selected value as addition.

The examiner respectfully submits that clearly Figure 3 of the cited reference disclose two portions of generator. The first portion is the polynomial calculation 307 and the second portion is the control 306 and selection (e.g. other components) module. Even thought, Figure 3 is not exactly as seen in Figure 3 or 4 of the present invention. However, Figure 3 discloses all the limitations cited in the independent claim 1 of the claimed invention broadly. The independent claims 1 and 16 do not require a structure of non-uniform sampling as argued by the applicant. In addition, the selected value is determined based on the 2-bit counter circuits 304 and 305 which clearly depends on the clock signal as fed source and the previous selected value because the output of counter is incremented based on the previous value (e.g. 0, 1, 2, 3 as x_i, x_i +1, x_i+1+1...).

b. The applicant argues in page 13 for claims 6 and 16 that there is no motivation to use the references to combine the missing windmill generator with the lower module as the control and select module.

The examiner respectfully submits that the previous Office action clearly disclose the benefits of the windmill random generator as an efficient simple high throughput random generator. Thus, it would obvious to replace the main

reference random generator with the windmill random generator in order to increase the throughput.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., limitations cited or explained in page 10 last paragraph to page 11 first paragraph) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The examiner can normally be reached on M => F from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chaki Kakali can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do
Examiner
Art Unit 2193

December 7, 2005

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SUPERVISORY PATENT EXAMINER
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